The Constraints of Poverty on High Achievement

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Research studies on school success often focus on the impact of discrete elements such as race, culture, ethnicity, gender, language, or school location on high achievement. The condition of poverty, however, may be the most important of all student differences in relation to high achievement; although not all schools have racial diversity, nearly all schools have at least some students living in poverty. In this paper, the authors review the literature on poverty, including its relationship with ethnicity and locale; search for commonalities that illuminate the relationship between poverty and high achievement; identify problems in data gathering that mitigate against the identification of high-ability poor children; and underscore the need to provide individual support and the development of resilience to low-income, high-ability students. Recommendations for improving the identification, services, and success of high-ability learners who are affected by poverty are included.

The field of gifted education has long sought to identify more students from traditionally underrepresented populations for highability services. Research studies on school success often focus on the impact of discrete elements such as race, culture, ethnicity, gender, language, or school location on high achievement. The condition of poverty, however, is not a discrete, easily identifiable variable. It is, in fact, difficult to identify potentially high-achieving students who are living in poverty. This is unfortunate, as poverty may be the most important of all student differences. It may not be productive to concentrate on the many ways groups of students or schools are different. Focusing on overcoming the limitations of poverty may be more productive in influencing the lives of individual students. That is not to say that race, ethnicity, language, setting, beliefs, and behaviors do not impact or are not important factors when understanding

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high achievement in individual students but rather that poverty may have the greatest impact on achievement. By always including poverty with diversity when achievement is studied, a clear picture of the influence of poverty alone has not emerged. Lines between races, differences within ethnicities, and shifting populations have made some categorizations increasingly less defining than the common influence of living in poverty. Nearly all public schools include students from poverty; understanding the constraints of poverty on high achievement is important for all such schools.

The question addressed here became of interest after one of the authors participated in Project Aspire, a Javits-funded project to find and assist high-ability rural youth from poverty, and in the 2006 National Leadership Conference on Low-Income Promising Learners. In the need to look beyond the gifted education literature, assistance from an educational scholar in the field of multicultural education was obtained. In this paper, the authors (1) review the literature on poverty and the poor, including its association with ethnicity and locale; (2) search for commonalities that illuminate the relationship between poverty and high achievement; (3) identify problems in data gathering that mitigate against the identification of high-achieving poor children; and (4) underscore the need to nurture family support and the development of resilience of low-income, high-achieving students on an individual basis in all school locales and in all racial or ethnic groups.

In a recent book entitled *The Gift of Education: How a Tuition Guarantee Program Changed the Lives of Inner-City Youth* (2006), author Norman Newberg presents a sobering picture of the complicated relationship between poverty and educational persistence. In 1987, 112 sixth-grade inner-city students in Philadelphia's Belmont Elementary School were promised a tuition-free college education if they graduated from high school. Of these students, 65% came from families below the poverty threshold, and 100% were African American. The sponsors surmised that the promise of a college education alone would encourage these students to remain in school and persist to graduation. Students struggled for many reasons, some of which were unanticipated by the philanthropists who were providing the "gift." And, despite unlimited remediation, counseling, and other support services, far fewer actually matriculated and graduated from

college than was expected. Poverty proved to be a burden simply too heavy to shoulder for most. The sobering conclusion was that money, in and of itself, cannot cure the ills of poverty, nor does money alone define the condition of poverty.

Definitions and Measurement of Poverty

The word *poverty* is sometimes defined tightly and at other times used as a vague and relative comparison. The term socioeconomic status (SES) is also commonly used (but not consistently defined) and refers generally to one's relative standing in regards to income, level of education, employment, health, and access to resources (U.S. Social Security Office of Policy Research and Analysis, n.d.). According to the United States Bureau of the Census (2005), a family is considered to be poor if its income for a particular year is below the amount deemed necessary to support a family of a certain size. For example, \$15,219 was the poverty threshold for a single parent with two children in 2004. The Free and Reduced Price Lunch program is frequently used as a proxy indicator of poverty. Children whose families have an income of 130% or less of the Federal poverty guideline can receive free meals at school, and those whose families have incomes from 131% to 185% of the poverty guideline are eligible for reduced-price meals. Confidentiality requirements, however, limit disclosure of this information without parental consent, making purposeful inclusion of low-income students fraught with another layer of administrative involvement.

The level of income does not adequately capture all of the differences between those who have resources and those who do not. The length of time the family has been in poverty, other family assets such as home ownership or a college savings account, and the poverty level of the family when the child was younger than age 5 all influence achievement preparation and performance (Rothstein, 2004). Rather than a discrete, independent variable, the condition of poverty is highly complex. Racial and ethnic groups may experience poverty differently, as will individuals within those classifications. Similarly, the experiences of individuals from the same geographic and popula-

tion density locales vary within those groupings, making it difficult and inaccurate to generalize according to school location.

Relationship Between Racial/Ethnic Diversity and Poverty

An examination of the percentages of children from currently identified groups in poverty showed that 14% of Whites, 33% of Blacks, 29% of Hispanics, 10% of Asians, and 17% of all children under age 18 live in poverty (Statistical Abstract of the U.S., 2006). However, when examining the information historically collected by the U.S. federal government related to students' racial or ethnic classification, it is clear that it is increasingly difficult to categorize children according to race and ethnicity. There are significant subgroups of Asian, Hispanic, and Middle Eastern populations, and the number of children claiming multiple group membership (or mixed) is rising. Immigration and intermarriage among races and ethnicities have resulted in greater diversity of ethnic groups and more multiracial births. The U.S. Department of Education has proposed new regulations (effective 2009) that will allow students to select multiple racial or ethnic categories on any federally required form (United States Federal Register, 2006), making it more difficult for researchers to capture achievement differences among the many groups who also are affected by poverty or to disaggregate poverty as a single determinant.

Neither locale nor race is helpful as a grouping factor. David Cotter (2002) pointed out that "since at least the early 1960s poverty has been treated in scholarly research, public policy, and popular culture as a largely urban, mostly black problem" (p. 534). This may be part of the reason that race and poverty are frequently linked. Although there is no denying the frequent association between race and class, race is not a causal factor of poverty. Beginning with the 1990 census, diversity and poverty have become more dispersed throughout all geographic areas and locale classifications. A report on the 2000 Census (Hobbs & Stoops, 2002) shows that 1in 4 Americans was of a race other than White; from 1990 to 2000, the percentage of Hispanics increased in every region; only the White population grew more slowly during the last decade than all other populations; regional concentrations of Blacks, Asians, and Pacific

Islanders diminished, with all states gaining an increase of these groups; the percentage of minorities increased in all regions of the U.S.; and nearly 7 million people claimed more than one racial heritage. Hodgkinson (2003) noted that families with an income less than \$10,000 per year produced 73 births per 1,000 females of childbearing age while those with income greater than \$75,000 produced 50 babies. Concluding that poverty is the most important risk factor for all children, he pointed out that one third of the babies born in 2000 will be affected by poverty. No racial or ethnic group is immune from poverty nor do they experience poverty in universal ways. Margie Kitano (2006) pointed out differences within immigrant groups and within groups experiencing poverty, making generalizations about immigrants or those in poverty inaccurate and misleading. For example, to assume all Cambodian immigrants are the same as all other Asian immigrants or that children of graduate students with limited income have the same experiences as children of parents with limited education and resources would not be correct. Recognition and appreciation of cultural difference will remain important in understanding and accepting individual children, but those differences by themselves are not detrimental to achievement.

A total of 41% of all fourth graders in the United States who qualified for Free or Reduced Price Meals in 2005 resided in areas considered rural according to the National Assessment of Educational Progress categories (National Center for Education Statistics, 2005). However, because different methods and definitions are used when compiling statistics, it becomes clear that there is no standardized definition of rural or urban. Although urban and rural schools are often viewed dichotomously, there is confusion as to meaning of *non*rural. Should small towns be included in rural classifications; does a single classification apply to an entire county or a school district; and are small cities of about 25,000, or "fringes" of midsize cities, urban? According to the National Center for Education Statistics, about 18% of U.S. public school students attended rural or smalltown schools not located near any metropolitan area, and 52% of all public school districts in the United States were in these locations. About 37% of individual school facilities were located in urban areas. but those schools contained about 74% of the students. Mosley and Miller (2004) reviewed variations in the factors affecting poverty in rural areas and concluded that although poverty exists nearly everywhere, nonmetropolitan residents were somewhat more disadvantaged by poverty than the poor who live near the greater resources of the cities.

Definitions of High Ability and High Performance

For the purposes of this paper, *high achievement* is defined as a level of performance that is higher than one would expect for students of the same age, grade, or experience. Specifically, proficiency is demonstrated by successfully mastering content (instructional) material beyond what is considered to be grade-level curriculum. For example, students who receive a score of 3, 4, or 5 on an Advanced Placement exam, which is collegiate-level work, while in high school would meet this criterion. The identifying characteristics of high potential include rapid learning, complex thinking, and creative problem solving (Coleman & Cross, 2005). State definitions tend to follow the federal definition (U.S. Department of Education, 2004):

The term "gifted and talented," when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities. (p. 544)

Gifted programs are school services that are intended to meet the special needs of these students. *High ability* and *academic promise* are broader terms that are sometimes used to describe a student "who performs at or shows the potential for performing at an outstanding level of accomplishment . . . when compared with other students of the same age, experience, or environment" (Indiana Code, IC 20-36-1-3, 2006).

Beyond definitions, researchers studying high achievement encounter additional roadblocks related to identification of high achievers. States have created their own curriculum standards for what students should know and learn. With educational standards in place, states must test student progress toward those standards using a test that is aligned with the standards. Most tests used to comply with the No Child Left Behind legislation are not designed to measure achievement above grade-level standards, however. Even the designated levels beyond basic proficiency (U.S. Department of Education, 2003) may not show advanced or more in-depth knowledge, but just that the student could answer more of the same-level questions correctly (Achieve, Inc., 2003). In other words, state proficiency tests may top out before they measure advanced-level skills. Some states have continuous standards that may eventually allow testing that puts student achievement on a continuum, but, at this time, data about student achievement above grade level are frequently unavailable.

Tests used for college admission such as the ACT, SAT Subject Tests, or Advanced Placement exams present another source for achievement at a high level. These data are disaggregated according to racial/ethnic classifications; however, when income levels are reported, they are reported according to student-supplied responses to a questionnaire, not federally verifiable income data. Another indicator of income is a listing of the number of fee waiver applications for students qualifying for Free or Reduced Priced Meals. Data are available at an aggregate level, but not always so that the researcher can look at individual students with high SAT scores, for example, to determine how those students performed on a more achievement-oriented measure such as Advanced Placement exams. The income level, even self-reported, is not fully available for individual students.

Achievement Motivation and Contributing Factors

Achievement-related beliefs, values, and goals are among the most important determinants of outcomes or school achievement (Wigfield & Eccles, 2002). Self-efficacy, or the belief in one's own ability to master tasks, changes with development and can be influenced by motivating activities (Bandura, 1997; Shunk & Pajares, 2002). Motivation itself is a fundamentally social phenomenon that is modified and transformed by the goals and engagement of the

learner (Hickey & McCaslin, 2001). Levels of motivation change over time as well (Dweck, 2002). With this dynamic relationship between context and motivation, the importance of providing stimulation to boost student confidence on appropriately challenging tasks is evident.

Dai, Moon, and Feldhusen (1998) determined that for students of high ability, personal beliefs of competence may be at the core of achievement motivation. These beliefs develop through interactions between the environment and personal characteristics. For gifted students, self-awareness of high potential is needed for high performance, but does not guarantee that performance. Attributing high performance to effort is motivating because it helps one feel in control, and high performers see success as due to both hard work and ability. Therefore, to encourage promising students from low-income environments to achieve at high levels, teachers must not only attend to their levels of confidence in their competence but also encourage their effort and build their foundational skills.

Statistics on Poverty and Achievement

Clifford Adelman (1996, 2006) has shown that the greatest predictor of postsecondary success is the satisfactory completion of mathematics courses beyond Algebra II and rigorous courses such as Advanced Placement during high school. Specifically, successful completion of a course in trigonometry or precalculus more than doubled the odds that a student with that level of mathematical preparation who entered college would eventually graduate. SES was important in the study, but not nearly as influential as rigorous academic preparation. Students from the lowest quintiles of family income who had the best academic preparation earned bachelor's degrees at a higher rate than most students from the highest quintile without a rigorous background. We do know, however, that to gain the rigorous academic preparation needed for success, a student must have the opportunity and background preparation to do well, which is often absent in low-income households.

In regard to the factor of opportunity, schools with a higher minority and low-income student population are less likely to offer rigorous curricula and Advanced Placement courses (Martin, Karabel, & Vasquez, 2005). They also are less likely to have experienced and qualified teachers (Kozol, 1991). Students from low-income, Black, Hispanic, or Native American groups are underidentified and underrepresented in rigorous coursework of any kind. High-achieving Latino students underenroll in selective programs for which they are qualified (Fry, 2004). Latino students were almost three times as likely to come from a low-income home as high-achieving White students (Gandara, 2005). Again, however, the point must be reiterated that low income and other classifications are often aggregated in statistical reporting, making it difficult to focus on poverty alone. Few children from high-poverty schools get the education needed in their early years that would prepare them for the advanced curriculum they will need for college preparation (Kozol, 1991; Newberg, 2006).

Abbott and Joireman (2001) used multiple regression analysis to study group differences in school achievement according to ethnic population as well as income levels of student families: "Across a variety of grades and tests, our results support the conclusion that low income explains a much larger percentage of the variance in academic achievement than ethnicity" (p. 13). Not surprisingly, they also found non-White families to be overrepresented among those of low income, but while ethnicity was also related to achievement, the relationship was more indirect. Low-income schools had more in common with each other, regardless of ethnic breakdown, than they did with high-income schools. However, Abbott and Joireman also reported that a sizeable percentage of variance in achievement scores could not be accounted for by ethnicity and income. Lee and Burkham (2002) concurred with the general findings by reporting that higher performing students tend to come from higher income and more highly educated families. Another important factor was the negative impact on academic performance of the concentration of one-parent families (Caldas & Bankston, 1999). Students, regardless of family structure, tended to do worse in schools that contained large numbers of one-parent families. To summarize, low-income students are significantly less likely to enter college than students from high-income backgrounds and significantly less likely to graduate if they do enter (College Board, 2005).

Research on the Achievement of High-Ability Students in Poverty

There is limited research in the literature on high achievement of high-ability students in poverty. Schreiber (2002) looked at advanced mathematics achievement without regard to race or income levels and found the level of parent education to be positively associated with student attitude toward achievement. In addition, the more the student believed that success in mathematics was caused by natural ability, the higher the student scored in advanced math courses. Davis-Kean (2005) concluded that the level of schooling of a parent, parental expectations for the child's education, as well as emotionally stable and stimulating home environments, could allow a child to perform well despite limited financial resources. In the 2002 study, Schreiber found that economic disparities existed even within the most advanced group of math students and were not constant from school to school. The lack of consistency from school to school and the influence of parental education regardless of race or income would lead to the suggestion that high achievement could vary and thus, that school contextual variables would be important.

The Discrete Impact of Poverty on School Achievement

Limited Access to Resources to Build Foundational Skills

Students of similar abilities enter school with differences in readiness to benefit from instruction primarily based on their "social class backgrounds" (Rothstein, 2004). It has been shown that children of parents with higher educational levels have been read to more frequently, have more books in the home, have already learned how to use computers, and have had differing patterns of interactive reading and conversation than those children from families with less education and fewer resources (Bianchi & Robinson, 1997; Chatterji, 2006; West, Denton & Germino-Hausken, 2000). The skills gained from early exposure and continued enrichment are transferable to a readiness for academic instruction and provide modeling for

achievement orientation. Hodgkinson (2003) reported that from birth to age 5,

forces have already been put in place that encourage some children to "shine" and fulfill their potential in school and life while other forces stunt the growth and development of children who have just as much potential. The cost to the nation in terms of talent unfulfilled and lives of promise wasted is enormous. (p. 1)

Furthermore, students from lower income families may have limited access to programs outside of school that provide lessons and enrichment opportunities that add to student competence in a learning environment, confidence in ability to learn new things, social interaction skills, and background information that may transfer to an academic setting. Involvement in school-related activities in general is associated with higher achievement (Eccles, Barber, Stone, & Hunt, 2003; Everson & Millsap, 2004; Schreiber, 2002). However, these opportunities frequently have registration and participation fees that make them inaccessible to students from low-income families. Lamont and Small (2006) concluded, "Class differences are greater than differences within racial groups; for instance, the black and white middle class parents resemble each other in the way they manage their children's leisure time" (p. 14). Middle and upper class parents, regardless of race or ethnicity, pass along cumulatively important advantages to their children through availability of organized leisure activities, summer programs, educational enrichment, family vacations, and connection to other families with similar supports (Lareau, 2002, 2003).

In other words, opportunities to learn in group settings and exposure to information-rich environments have been found to be less available to children in poverty, placing them at a disadvantage relative to more affluent classmates when they enter the school environment. Opportunities for high-ability students in particular may be differentially available according to structures within the public schools that allow greater resources to be available to the dominant culture (Cross & Cross, 2005; Kozol, 1991). Cultural factors operate in conjunction with access and social capital, not independent of

them. Poverty may hinder achievement in general and high achievement in particular.

The Myth of Value Differences Among Cultures

Is there a "culture of poverty"? Cultural deficit models locate responsibility for achievement gaps between groups within individuals (i.e., "blame the victim"). Such models contend that the poor and ethnic minorities subscribe to values that are not the same as those of the middle or upper classes. The transmission of these values from parent to child is seen as perpetuating low educational and occupational attainment (Bullock, 2006). According to Ford and her colleagues (Ford, 2006; Ford, Harris, Tyson, & Trotman, 2002), this type of deficit thinking is the principal barrier to inclusion of African American students in programs for the gifted and talented. However, when looking at the concept of "values" of different groups, several researchers have found that lower income students aspire to college just as do higher income students. Kozol (1991) would argue that all parents want their children to succeed. Lamont and Small (2006) have called for more research on how different cultural processes might influence behavior and beliefs. Fordham and Ogbu (1986) pointed out that some group identity processes might interfere with achievement behaviors. But, lower college attending and graduating patterns may not be as much a difference in values, as they are a reflection of fewer avenues for attending, fewer additional tangential opportunities, and fewer supports for sustained achievement.

Underrepresentation of Children From Poverty in Rigorous Courses and Gifted Programs

Programs for gifted and talented or high-ability students may not begin until the third or fourth grade and are frequently reliant upon standardized test scores for access. Students who had the early advantages outlined previously are in a position to perform better on standardized measures. It is well documented that students from racial minorities are traditionally underrepresented in these programs (Ford, 2005). What is not clear, however, is the number of students in these programs that come from a background of poverty.

Donovan and Cross (2002) found that there is a national overrepresentation of minorities in special education and underrepresentation of those students in gifted education. They reported that there were no assurances that bright students would have been exposed to effective instruction or classroom management in order to be included in the screening for gifted services.

Hodgkinson (2006) stated that the lowest income group produces 9% of the students identified as being gifted and talented, whereas the highest income group produced 47% of those identified. In addition, programs for gifted students include 77% White students, 7% Black, 9% Hispanic, 7% Asian, and 1% Native American (U.S. Department of Education, 2000). These statistics show that Black and Hispanic students are underrepresented according to the population and Asian Americans are overrepresented. Ford (2006) points out that teachers often fail to identify children of certain cultural and economic groups for increased academic rigor. Other reasons for underidentification include an overemphasis on test scores for participation, the use of weighted matrices, and attendance and behavioral concerns that negatively impact the participation of underrepresented groups.

Protocols for identifying who should be included in advanced opportunities are far less important than providing advanced opportunities with support to *any* student who might possibly take hold and develop in a positive manner. According to Pat O'Connell Ross (2006), too much research time has been spent on trying to find the perfect identification system to find students to include in programs for the gifted. Instead, she recommends that we spend our time implementing instructional strategies that we already know are effective and more thoroughly researching what works for students from that population.

Other Issues of Relevance to High Achievement and/or Poverty

Psychological development based upon the theories of Vygotsky (1978) views all behavior, including learning, as occurring in a sociocultural context, thus supporting the view that student academic performance cannot be separated from the context in which it occurs. Indeed, the school and the social groups within the school will certainly influence the behavior of the learner. Accomplishments derive from the interactions of the personal characteristics of the student and the external circumstances (Bandura, 1986). Motivational patterns and engagement in learning will be inhibited or facilitated by teacher support or bias, peer influence, availability of learning resources, good health care, encouragement from home for achievement behaviors, parenting styles, and other influences. Academic performance is a result of complex combinations of individual characteristics and social contexts (Mullis, Rathage, Mullis, 2003).

Students from some racial or ethnic groups may have an additional battle to fight in pursuing high academic achievement beyond the complication of poverty. Collective identity may include language or other conventions that are sometimes at odds with those of the group traditionally experiencing success (usually White and middle or upper class). Fordham (1988) examined the difficulties Black students feel in pursuing high academic achievement. Because the characteristics required for success were at odds with Black culture, high achievers had to lead a dual existence and develop a kind of "racelessness" in order to succeed. In addition to the "forced choice dilemma" of excelling or belonging in an antiintellectual society (Gross, 1989), minority students may have to choose between the individualistic focus of high achievement and the collective ethos of their racial community. Ogbu (2004) found that few African American students reject good grades as "acting White," but reject instead the attitudes and behaviors that contribute to academic successes (e.g., speaking standard English, participating in class, taking advanced math or science, or having too many White friends). Ogbu emphasized that rather than rejecting the behaviors of success, students may be reacting to the need to work too many hours or having too little time to hang out with friends. This last finding is consistent with what was found in rural schools with high poverty as well (Cross & Burney, 2005). Strategies for coping with these issues included strong family support and selecting a peer group who is similarly serious about school.

Strategies for Success

Importance of Early Intervention, Better School Programming

The College Board has emphasized the importance of transition from high school to long-term success in college, but readiness for kindergarten was cited as a greater predictor of long-term success (Hodgkinson, 2003). Newberg (2006) suggested that sixth grade is probably too late for a successful intervention. If advocates are to encourage the development of habits of academic success, especially when those habits may not be modeled in the home, they must start earlier. Starting with kindergarten or preschool offers opportunities to produce students who feel more confident and competent as learners. Donovan and Cross (2002) encouraged early and continued development of gifted behaviors in poor and minority students so that they will be identified for programs for gifted students and successful after placement.

Teachers and schools must hold high expectations and provide the extra study support, summer programs, caring staff, and college tours that will allow those students from economic disadvantage to gain familiarity and proficiency needed in the culture of success. Frank Worrell (2006) suggested that the fostering of resiliency is more important than self-esteem. Teachers and primary caregivers must instill self-efficacy and an understanding of delayed gratification. Schools must create the supports needed to include and encourage low-income learners of promise. These students may not have the homework supervision or even the opportunity to work on schoolwork at home. They will need individual support, reminders, flexibility, and additional chances to perform. Instead of finding reasons to exclude students who struggle, schools must increasingly find ways to support these students engaging in rigorous options.

Holistic Identification of High-Ability Students in Poverty

Especially with early identification, the concern must be less with formal identification, less with advanced performance alone, and more with providing opportunities to find and develop talent, using a

holistic approach when poverty is involved. Coordinating early identification of promising learners with special education efforts to find those with learning difficulties would seem to be a useful direction. Schools are often reactive rather than proactive when it comes to the provision of services. Because of the opportunity gap that exists for children from poverty in acquiring early academic skills, waiting until grade 3 or 4 to identify for academic promise will deny these learners their opportunity to show their strengths. Their strengths are likely to be overshadowed by other students who have acquired advanced academic skills during the first 3 years of school and before. Services must be offered on a continuum so that those with advanced academic skills can proceed through an appropriately challenging curriculum while ways are found to identify and develop any child exhibiting potential or motivation.

Developing Resilience

Resilience generally refers to the ability of a person to overcome adverse circumstances; with respect to the gifted student from poverty, resilience would enable the student to succeed in spite of the limitations of the circumstances. Kitano and Lewis (2005) have reviewed the literature on resilience and coping to look for implications for gifted youth from at-risk environments, including poverty. They concluded that although high ability was not a predictor or requirement of the capacity to overcome adversity, cognitive ability was a supporting factor for the development of resilience. Effective coping strategies differ depending upon particular circumstances, but successful academic experiences can enhance self-efficacy, which, in turn, supports resiliency. Kitano and Lewis also pointed out specific factors among different groups that affect resilience but also some common positive coping strategies that might be shared across groups. Examples of strategies to enhance resilience included enhancing connectivity with a caring person, encouraging self-efficacy and optimism, supporting cultural strategies and heritage, and validating experiences with bias. Another study identified similar protective factors for economically disadvantaged, ethnically diverse, academically talented high school students as including supportive adults, friendships with other high

achievers, and opportunities for advanced courses and involvement (Reis, Colbert, & Hébert, 2005).

Importance of Family Support

Primary caregivers must be included in developing a support system for high achievement among poor children. Counselors in Project Aspire reported that if they could engage someone from the family in supporting college-related goals, the student was more likely to attend college (Burney & Cross, 2006). In a study involving guaranteed college tuition for students who persisted to high school graduation, parents who participated in the program in support of their students were more likely to want to improve their own education (Newberg, 2006). These students may not have family members who are experienced with advanced academic achievement or opportunities. Project Aspire counselors reported that rural students from poverty frequently had no relative who had gone to college or who had taken the advanced courses necessary to be successful at the college level (Burney & Cross, 2006; Cross & Burney, 2005). The 2000 Census reported that nearly a quarter of all adults living outside a metropolitan area do not hold a high school diploma (U.S. Department of Agriculture, 2003).

According to Ford and Harris (1999), poverty is a major risk factor in decreasing family involvement in schools. As Maslow (1954) noted, meeting basic needs (food, shelter, safety) takes precedence over higher level needs (e.g., the need for achievement). Although poverty is not a rationalization for low levels of family involvement, poverty must be understood as a powerful barrier to family involvement and student achievement. In addition, lack of family involvement should not be construed as lack of concern on the part of caregivers. Many low-income families do not have the luxuries or freedoms that accompany membership in the middle class. For example, persons with low incomes may have less secure jobs and no health benefits. Discretionary time may not be possible for those who perform shift work. Those in poverty cannot afford to hire tutors for their children. Schools must, therefore, be responsive, creative, and persistent in their efforts to involve and support poor families as a whole.

Importance of Mentors

The presence of a key person who guides and monitors the student over a long period of time is critical (Burney & Cross, 2006; Gandara & Bial, 2001; Gates Education Policy Paper, 2003; Kitano & Lewis, 2005; Newberg, 2006). Cross and Burney (2005) found that highability students, including those from poverty, lead busy lives. In addition to school, like many teenagers, they are likely to have jobs and a social life. In that case, advanced educational opportunities may be viewed as optional, too time consuming, and eventually abandoned. All mentioned studies support the conclusion that high-performing students from poverty may be important targets for the intervention of a caring adult. Schools and colleges also need to provide more focused academic and social support services to help students persist through high school, apply for postsecondary admission and financial aid, and stay in school until they graduate. An informed adult who can follow up, assist with requirements, and coach them through processes that may be totally unfamiliar may be especially needed by college bound students of poverty. Success frequently depends on sustained intervention by a caring adult and the building of a relationship with individual students and their families.

Conclusion and Considerations

Low-income students of academic promise offer the nation's best hope for reversing the trend of an increasing number of families living in poverty. But, in order to do so, the following recommendations must be considered:

More complete information is needed about individual students exhibiting high achievement so that it can be determined whether or not the group of high performers includes students from poverty. One way to collect such data would be to assign each student an individual test number so that crucial information for appropriate instruction can follow the student from grade to grade and from school to school. This is especially important given the high degree of mobility of low-income families.

- Disaggregated data on standardized achievement measures could be studied to compare schools with a greater success rate with students from poverty with other schools with similar demographics that are not succeeding and to follow-up with qualitative studies of academically successful high achievers living in poverty.
- 3. The sociocultural context in schools can be studied to determine contexts that can positively influence motivation or the "will to succeed."
- 4. Students of promise from all groups and income levels and locales as early as kindergarten should be identified and provided with the enriched and accelerated instruction for which they are ready.
- 5. Student programs for those with advanced academic skills may not serve well those who have potential for high performance but who have not had previous opportunity to develop those skills. Adjustments will need to be made to include students with a less enriched academic background.
- 6. Professional development for all educators is needed for them to become culturally competent, to understand the tremendous limitations of living in poverty, to recognize high ability in students not from the middle class, and to gain a commitment to nurture every child.
- 7. Low-income learners of academic promise need long-term, consistent support from caring, committed persons to retain them in the curriculum that will provide the skills for their long-term success.

Urie Bronfenbrenner (1989) proposed an ecological approach as a means of conceptualizing human development. According to this model, one must take into account the various contexts that affect human behavior. According to Bronfenbrenner, socioeconomic status impacts, for example, one's neighborhood that, in turn, influences the type and level of schooling that one receives, which influences one's academic/cognitive development. Banks and Banks (2001) extend this to issues of giftedness, whereby high achievement is not the result of singular or discrete factors, or additive factors, but rather the result of a dynamic relationship that exists among all factors.

The keys to making a difference for students of high ability are to remove the ceilings to their learning experiences, to provide them with academic challenge, to allow them to build a strong academic foundation in accordance with their capabilities, and to give them the self-regulating strategies to enable them to persist in the face of difficulties. The key to making a difference in the lives of children is not about which group they belong to (e.g., African American, Moslem, Latino, Vietnamese, rural, Southern, and so forth). It is about nurturing individual children, especially those who do not have access to resources that foster learning and promote high achievement. The changing demographics within our country are only going to increase diversity of all types within all schools. It is increasingly important to look at children as individuals and not just as members of groups. School personnel who focus on differences of groups instead of the needs of individuals may be missing the opportunity to make a difference.

High achievement increases the likelihood of attainment of postsecondary education; it is that level of attainment that is associated with increased lifetime earnings. Increased education is what will allow students to escape poverty and its limitations for themselves and future generations. Programs for gifted students have been criticized as favoring those with greater advantage. If we can truly provide advanced opportunity accompanied by the necessary support for high performance to students from low-income status, then gifted programs will be seen as the necessary vehicle for students of promise and future generations to escape poverty.

There is no question that caring adults play a primary role in their children's school success. But, the presence of parents who value and support their child's talents is not, in itself, enough. As pointed out by Banks and Banks (2001):

While factors such as the intellectuality of the home may not be associated with any particular cultural or ethnic group, one's socioeconomic status is a constraint on one's ability to provide a home environment that is sufficiently stimulating to the gifted child. (p. 370)

Poverty is a complex condition that calls for a "reformulation of our traditional views of identifying and serving gifted children" (Banks & Banks, p. 370).

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